EPC-12
Configuration Software User Manual

INDEX

1 General Purpose....1
2 Installation of Program....1
3 Entering to Program....2
4 Device Definitions Menu....2
4.1 Add / edit device....2
4.2 Disconnect....3
4.3 Close....3
4.4 Connecting To A Previously Saved Device, Deleting A Device and Editing Device Connection Settings....3
5 Main page (Instantaneous Values)....3
6 Settings Menu....4
6.1 Device Configurations....4
6.1.1 RS-485 Parameters....4
6.1.2 General Settings....4
6.1.3 Unit and Multiplier Settings....4
6.1.4 Tariff Settings....4
6.1.5 Write / Delete Index....5
6.2 Program Settings....5
6.2.1 Change Language....5
6.3 User Operations....5
6.3.1 Add / Edit....5
6.3.2 Authorization....5
7 Counter Values Menu....5
7.1 Instantaneous Values....5
7.2 Log Reading....5
8 Chek In / Out....5

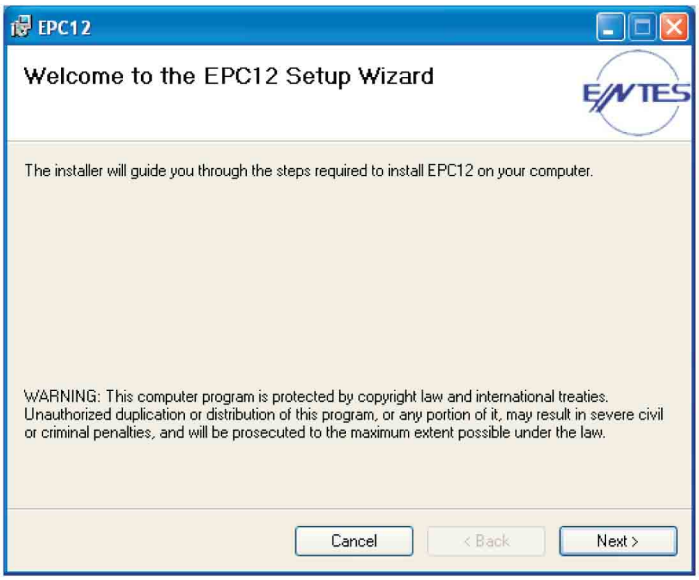
1 General Purpose

EPC-12 Configuration Software is designed to configure EPC-12 via a PC, to monitor the counter values remotely, to write values into counters remotely and to read EPC-12 log records.

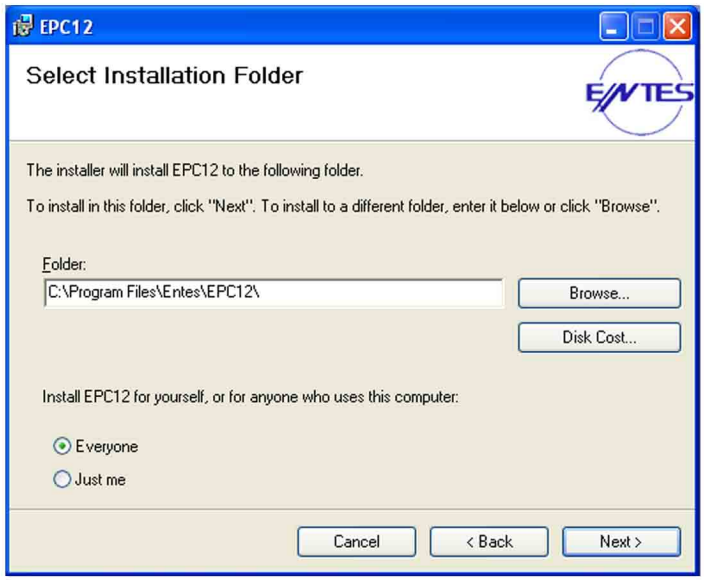
2 Installation of Program

Run the “setup.exe” file in the EPC-12 Setup folder on the CD which came with the EPC-12 that you bought.

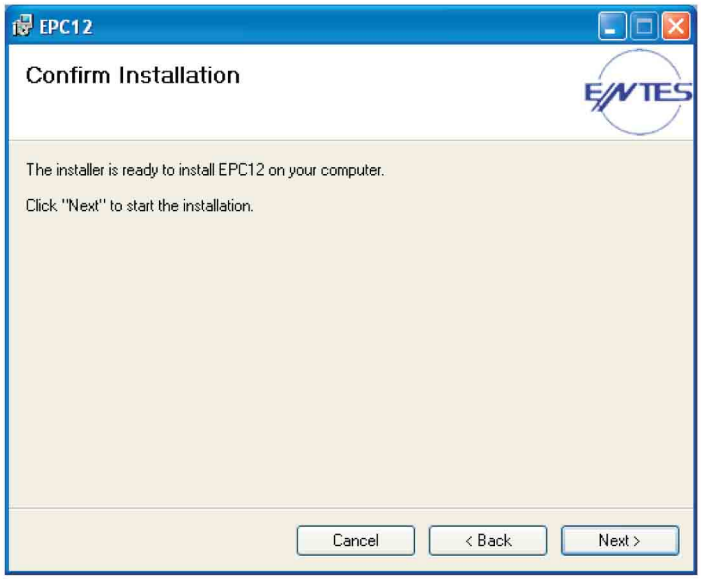
Note = Turn Windows Updates on for .NET Framework updates.


EPC12
Welcome to the EPC12 Setup Wizard
The installer will guide you through the steps required to install EPC12 on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

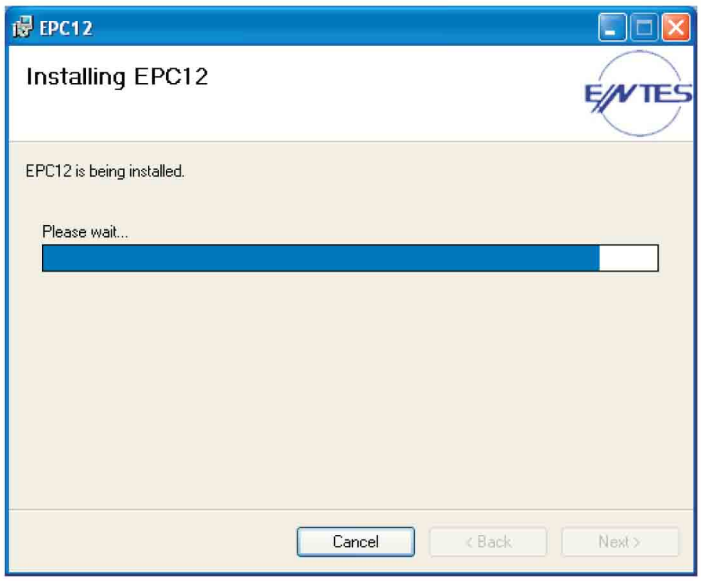
On the appearing screen, click on Next button.


EPC12
Select Installation Folder
The installer will install EPC12 to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files\Entes\EPC12\
Browse...
Disk Cost...
Install EPC12 for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >

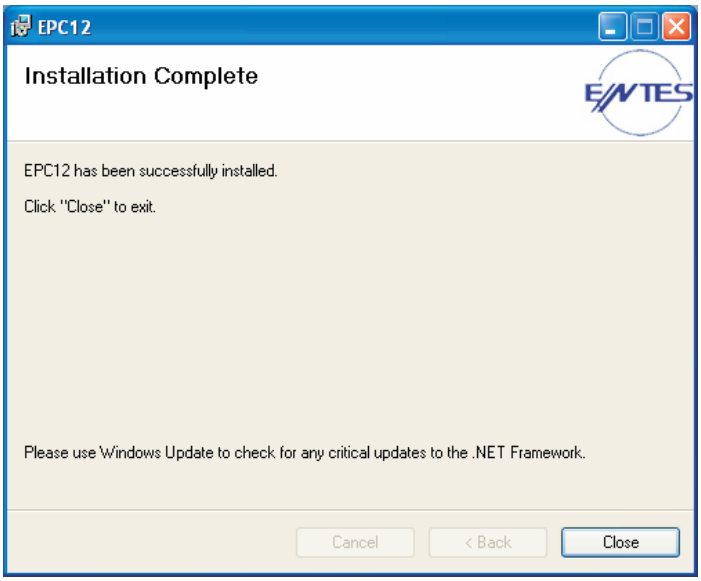
Select the folder that you want to install the program by clicking on the Browse button and click on Next button. Program will be installed to Program Files\Entes\EPC12 folder by default.


EPC12
Confirm Installation
The installer is ready to install EPC12 on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

Click on Next button for the installation to start.



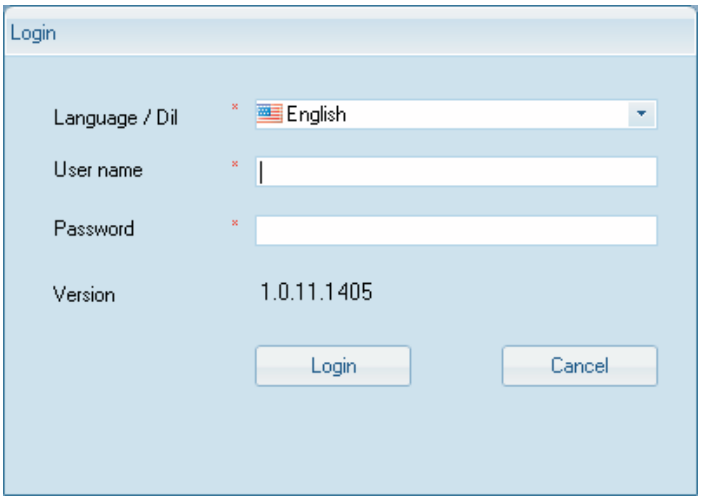
The program will start to be installed.



When the installation is complete, click on Close button to exit setup.

3 Entering to Program

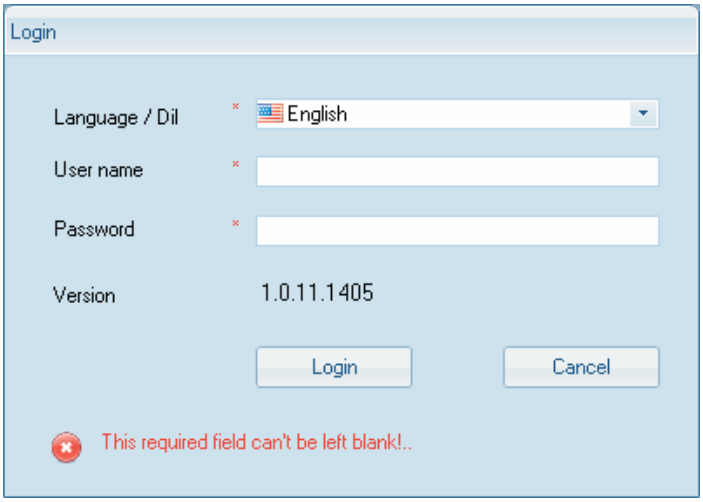
You can start the program by double-clicking on the EPC-12 Configuration Software shortcut or by selecting it from the Start menu. When you start the program for the first time, Login screen will appear and you will be asked to enter your User name and Password

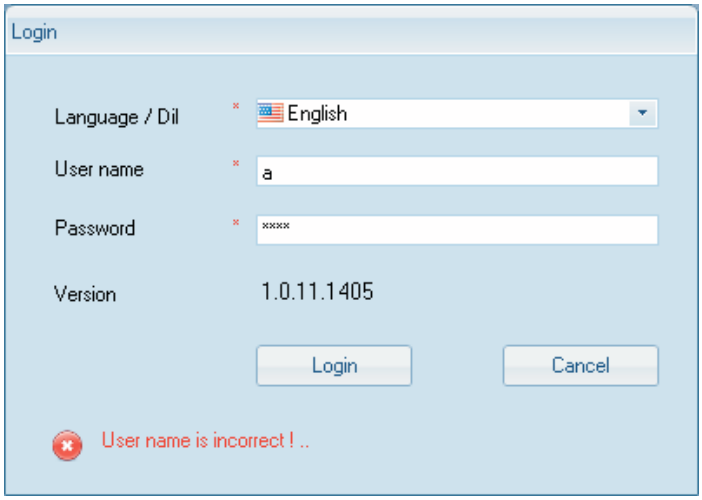


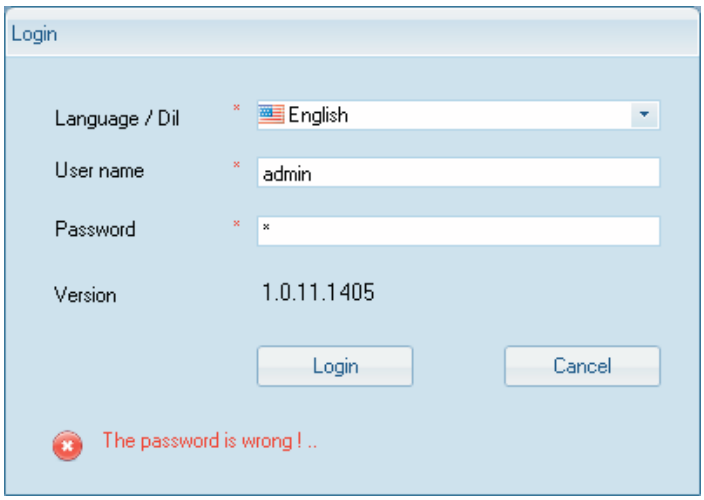
Additionally, you can select your language on this window. After you selected your Language and entered your User name/Password information, click on Login button.

Note : If you are starting the program for the first time; enter “admin” as the User name and “1234” as the Password. You can change your password from the User Operations menu under Settings menu.

If you don't enter a User name and Password or you enter the wrong ones, a warning message will appear as displayed in the screen shot below. Login to the program by entering your User name and Password correctly







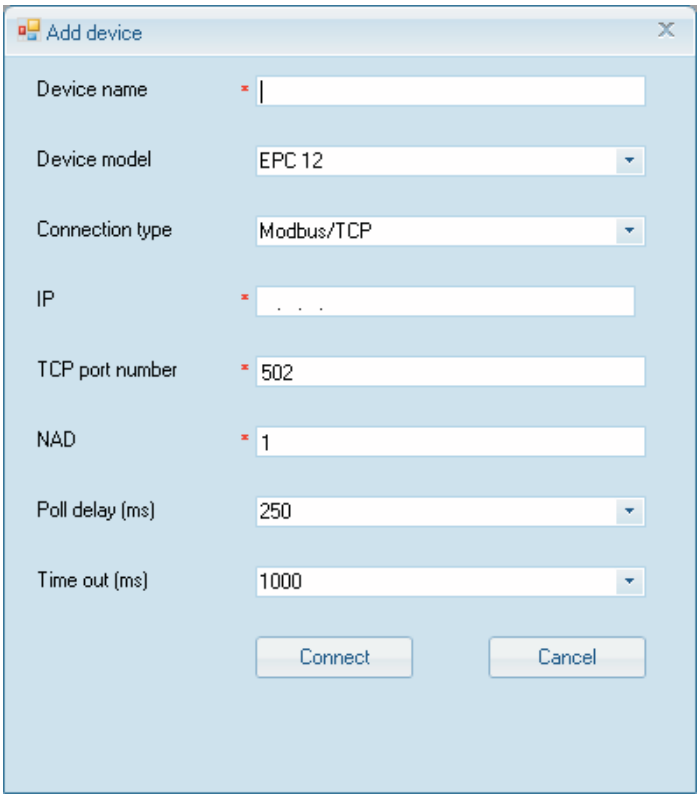
4 Device Definitions Menu

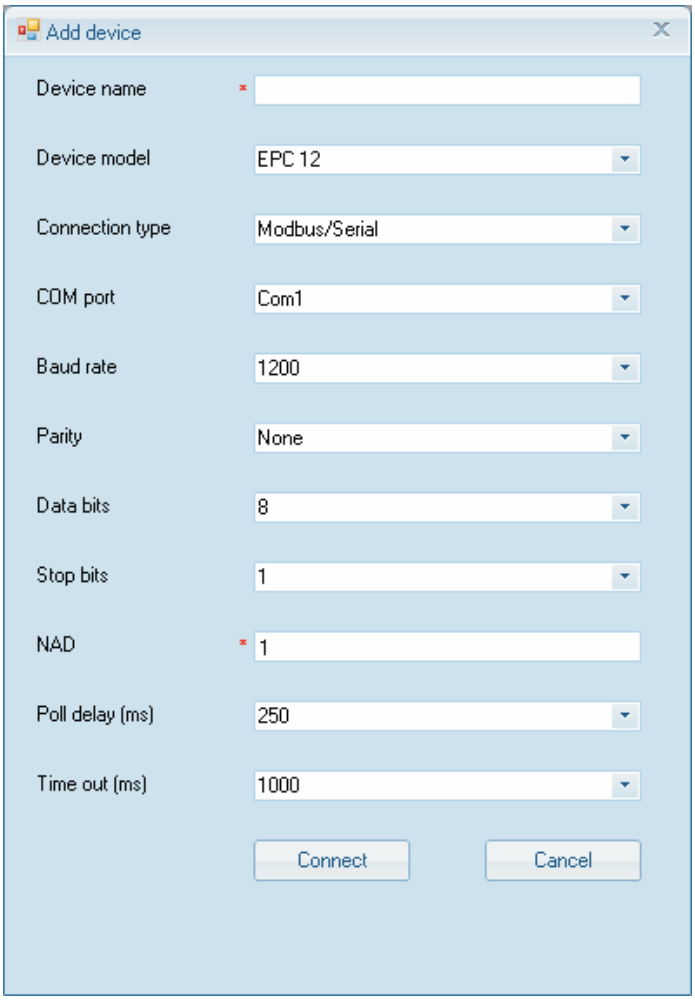
4.1 Add / edit device

In order for you to be able to configure device settings and to monitor your meters by connecting to your device after you logged in to the program with your User name and Password, you must enter the connection settings. If you are using the program for the first time or there isn't a device that you previously defined, “Add device” screen will be opened automatically. You can enter a name for your device in the “Device name” field (EPC-12 on 1st floor for example). Afterwards, you can select the type of your device. You can select the “Connection Type” as Modbus/TCP or Modbus/Serial. The screen will change according to this choice. When you select the connection type as Modbus/TCP; click on “Connect” button after you entered IP address, TCP port no, NAD (Device address), Poll delay and Time out information of your device.

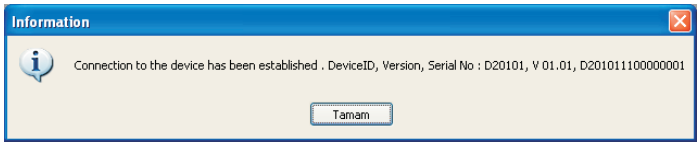
When you select the connection type as Modbus/Serial; click on “Connect” button after you entered Com port, Baud rate, Parity, NAD (Device address), Poll delay and Time out information of your device.

After you click on “Connect” button, entered connection settings that you entered will be saved to the
system automatically. This ensures that you will be able to connect to your device by selecting it according to its name from a list and you will not be asked to enter any settings when you close and re-open the program.





When the connection is successfully established; an information message including the ID, version and serial no information of the device will be displayed.

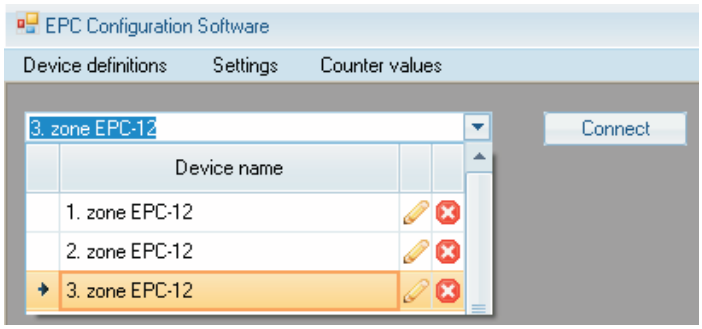

Information
Connection to the device has been established . DeviceID, Version, Serial No : D20101, V 01.01, D201011100000001
Tamam

If the device you're trying to connect is not EPC-12, a warning message will be displayed as below.

4.2 Disconnect
Disconnect option under the Device definitions menu is used to end the currently ongoing connection.

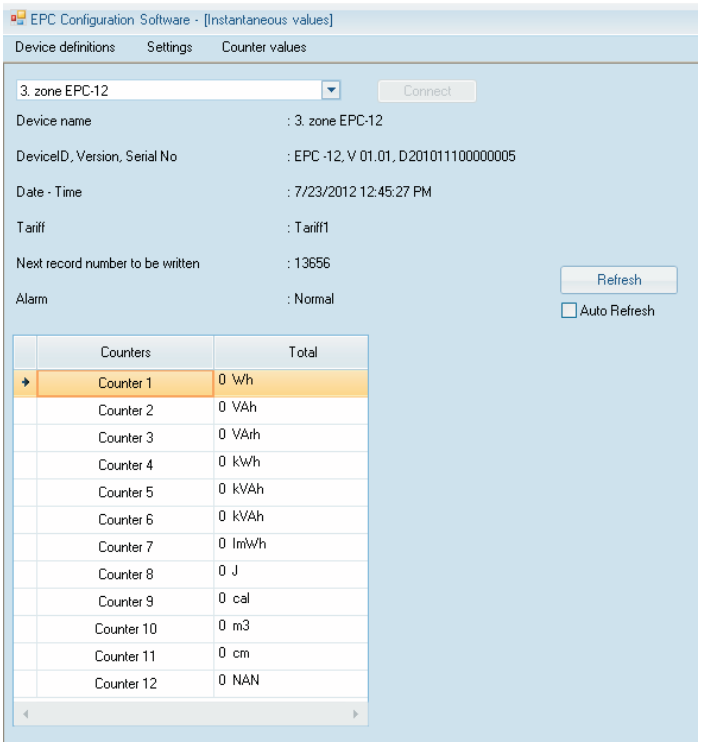
4.3 Close
Close option under the Device definitions menu is used to exit from the program.

4.4 Connecting To A Previously Saved Device, Deleting A Device and Editing Device Connection Settings
If there is a device connection which you defined previously, Add device screen will not be displayed automatically after you entered your User name and Password. In order to connect to a device that you defined previously, you can connect to that device by selecting your device and clicking on Connect button as shown below.
If you want to connect to a device that you didn't define beforehand, you can add a new device in the Add / Edit Device screen under Device definitions menu and connect to it.
If you want to delete a device that you defined previously, you must select it as shown below and click on the delete button (X icon). You will be asked to confirm the deletion before the defined device is deleted.
If you want to change the connection settings of a device that you previously defined, you must select it as shown below and click on the edit button (Pen icon). You can change settings on the appearing window.
If you want to connect to a device while you are already connected to another device, you must end your current connection by clicking on Disconnect option under Device definitions menu. Afterwards, you can connect to a new device after you clicked on Add / Edit device button again and created a new device or if there are connections that you defined beforehand, you can select these devices and connect to them by clicking on Connect button as shown below.



5 Main page (Instantaneous Values)
When you start to use the program after the connection with the device has been established, Instantaneous Values page will open automatically. The definition of the device that you are currently connected to, device ID, version, serial number, date-time-tariff information of the device, log record number that the device will do next and alarm information can be read on this screen. Additionally, you can read counter values with tariffs and as totals with unit information. You can refresh the screen manually by clicking on the Refresh button or you can make the displayed information on the screen refresh automatically every 10 seconds by clicking on the Auto Refresh option. When you select Auto Refresh button, the menus will appear passive until display refreshes once. After the refresh occurs once, the menus will become active. When you select the Refresh button, you will not be allowed to access the menus until the display refreshes.

Attention : The most appropriate screen resolution for the program is 1024x768 pixels. If the screen resolution is not set to the appropriate value, some values may not be displayed out of page.



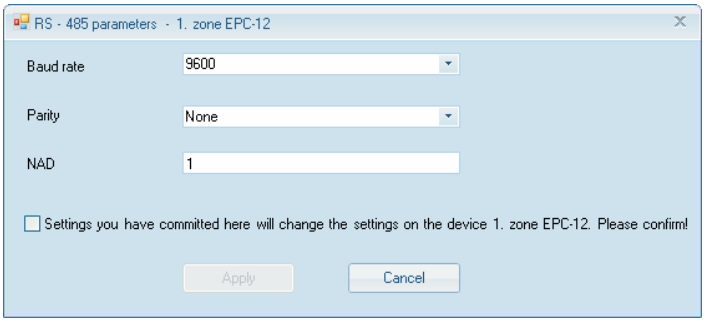
6 Settings Menu

6.1 Device Configurations

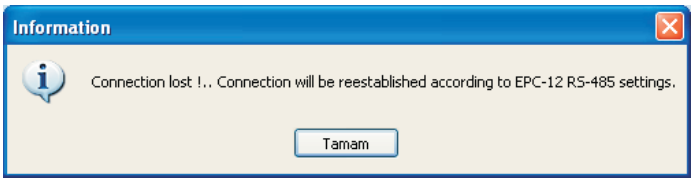
You can adjust the settings for your EPC-12 device by selecting Device Configurations from the Settings menu. RS-485 Parameters, General Settings, Unit and Multiplier Settings, Tariff Settings, Write/Delete Index Settings can be found under Device Configurations menu.

6.1.1 RS-485 Parameters

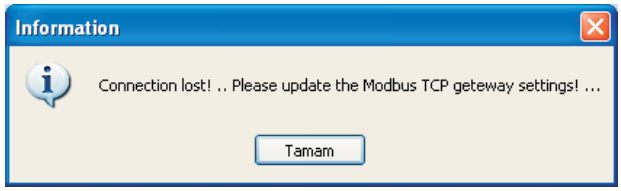
RS-485 parameters are necessary settings for the communication between your EPC-12 device and a PC. You can set these parameters from the menu settings on the EPC-12 device or by using EPC-12 Configuration Software.
When you select RS-485 Parameters from Device Configurations, a screen will be displayed as below. When you change the RS-485 Parameters, Apply button will not be clickable until you check the box next to "Settings you have committed here will change the settings on the device … . Please confirm!".


RS - 485 parameters - 1. zone EPC-12
Baud rate 9600
Parity None
NAD 1
Settings you have committed here will change the settings on the device 1. zone EPC-12. Please confirm!
Apply
Cancel

When you change these settings while you are connected to your device via Modbus/Serial, the settings you committed in the Add / Edit device window will be changed according to EPC-12 RS-485 settings by the program and the connection will be automatically reestablished.

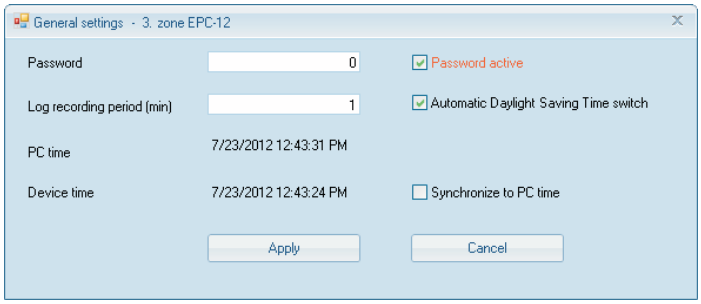


If you are connected to your EPC-12 device via Modbus/TCP, you will lose your connection when you change the Baud Rate and Parity settings in RS-485 parameters and you will be asked to enter your Modbus TCP Gateway settings according to EPC-12 RS- 485 settings. When you enter your Modbus Gateway settings according to EPC-12 device and click on OK button, the connection will be reestablished.



6.1.2 General Settings

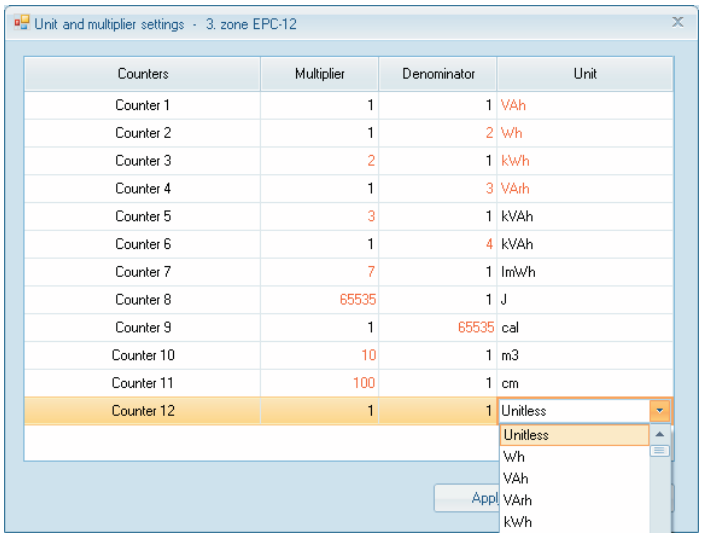
You can set a new password, activate/deactivate an existing password, change log recording period, activate/deactivate DST (Daylight Savings Time) or synchronize the device date/time and your computer date/time by clicking on General Settings under Device Configurations menu. In order to prevent you from forgetting the changes that are committed in this menu, changed settings will be marked red after each change. Apply button will not be clickable unless you make any changes.



When you change any of the settings and click on Apply button, you will be asked to confirm the changes that you committed. The committed changes will not be in effect if you don't answer the confirmation with Yes.

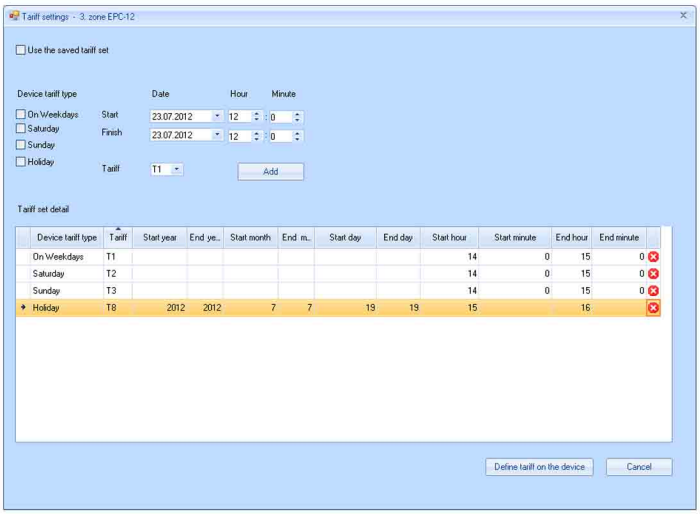
6.1.3 Unit and Multiplier Settings

You can set multipliers and denominators for the pulses that come to EPC-12 inputs and define units for the counters that you are reading by clicking on Unit and multiplier settings under Device Configurations menu. In order to prevent you from forgetting the changes that are committed in this menu, changed settings will be marked red after each change.



6.1.4 Tariff Settings

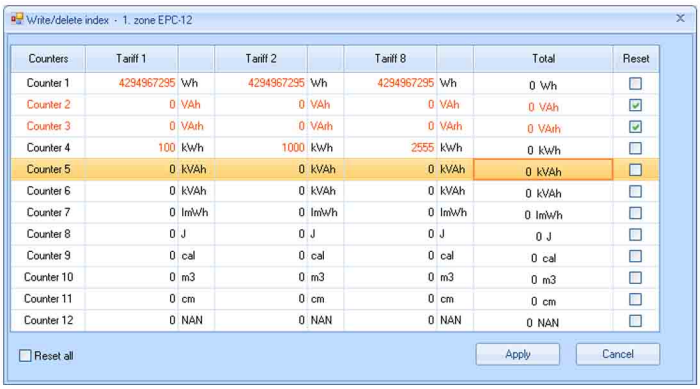
Holiday, Saturday, Sunday and Weekday tariff can be programmed (8 for each) under tariff settings. You can name the tariffs that you entered with numbers from 1 to 8. You can select any tariff (for example T1 tariff) more than once provided that it doesn't conflict with another tariff's time slot. If there is a previously set time slot, you will not be allowed to create another tariff in this set time slot. If you don't create any tariff, the device will save the incoming pulses to T1 tariff.
Tariffs which are set as holiday tariffs are prioritized over Saturday, Sunday and weekday tariffs. If the 5th of June is set as holiday tariff and this tariff is set as T7, T7 tariff will be active when June 5th comes. If there is a tariff which is set as Saturday, Sunday or weekday in this time slot, that tariff will be deactivated for this day.
You can delete a previously set tariff by selecting it and clicking on the X button on the Tariff settings window.



After you entered your tariff settings, you can click on “Define tariff on the device” button to activate these tariff settings. When you click on “Define tariff on the device” button, you will be asked if you want to save the tariff set. When you save the tariff set you entered, you can later select any tariff set you want without going into separate tariff settings by checking the “Use the saved tariff set” checkbox.

6.1.5 Write / Delete Index

You can delete counter indexes of your EPC-12 device or write new ones on the Write / Delete Index window under Device Configurations menu. In order to change index values, “Counter Set” menu on the EPC-12 device has to set as “Enable”. Otherwise, “This feature is deactivated on the device! ..” message will be displayed when you try to change index values. You can change the index values only by entering values to counters with tariffs. Total counters can only be deleted (reset to zero). If you didn't set any tariff, T1 tariff will be active and you will be able to change index values by writing to counter with T1 tariff.
When you want to delete counters, you can do it by clicking either “Reset all” checkbox for all counters or separate “Reset” checkboxes for separate counter and click on Apply button. For security purposes, you will be asked if you want to reset the counters and this message will have a wait time of 5 seconds. If you answer yes to “Are you sure you want to reset the counters ?” question, counters will be reset.
In order to prevent you from forgetting the changes that are committed in this menu, changed settings will be marked red after each change.


Write/delete index - 1. zone EPC-12
Counters
Tariff 1
Tariff 2
Tariff 8
Total
Reset
Counter 1 4294967295 Wh 4294967295 Wh 4294967295 Wh 0 Wh
Counter 2 0 VAh 0 VAh 0 VAh 0 VAh
Counter 3 0 VArh 0 VArh 0 VArh 0 VArh
Counter 4 100 kWh 1000 kWh 2555 kWh 0 kWh
Counter 5 0 kVAh 0 kVAh 0 kVAh 0 kVAh
Counter 6 0 kVAh 0 kVAh 0 kVAh 0 kVAh
Counter 7 0 ImWh 0 ImWh 0 ImWh 0 ImWh
Counter 8 0 J 0 J 0 J 0 J
Counter 9 0 cal 0 cal 0 cal 0 cal
Counter 10 0 m3 0 m3 0 m3 0 m3
Counter 11 0 cm 0 cm 0 cm 0 cm
Counter 12 0 NAN 0 NAN 0 NAN 0 NAN
Reset all
Apply
Cancel

6.2 Program Settings

6.2.1 Change Language

Although you can select the program language at the start of the program, you can also select it from Program settings menu.

6.3 User Operations

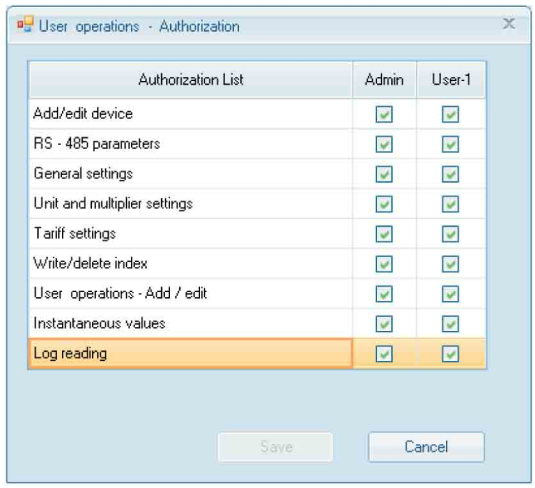
6.3.1 Add / Edit

You can add new users, change password/user name/status of users and delete users by selecting Add / edit option under User operations menu. Program will have only one admin. Admin can add a new user, edit a current user and change the authorization properties of users. Users can use the program according to the authorization properties which are given to them by the admin.
Admin can't change its own user name but can change its password.

When you add a new user, you will be asked if you want to change the authorization properties for the new user and if you want, you will be able to set authorization properties for the new user.

6.3.2 Authorization

Admin can change the authorization properties of users from the User operations menu. Users can't change their authorization properties.



7 Counter Values Menu

7.1 Instantaneous Values

You can monitor counter indexes with tariffs and total counter indexes of your EPC-12 device at that time with unit information by clicking on the instantaneous values option under Counter Values menu.

7.2 Log Reading

You can read past counter indexes of your EPC-12 device with date and tariff information by clicking on Log reading option under Counter Values menu. In order to be able to read past log records, a starting date/time and an ending date/time must be entered. After the starting and ending time and date information is entered and “Get report” button is clicked on, reports will start coming in. When log reading is finished, an informative message indicating that the log reading is finished will be displayed. You can read Tariff consumption and Total difference consumption (the difference between ending and starting dates) on the bottom lines of the log records table. You can filter with regard to tariff by dragging the Tariff column to the are where it says “Drag a column here to group by this column”. Additionally, you can save this table to your PC by clicking on the CSV icon.

8 Check In / Out

A simple example on how you can monitor check in/check out operations using log reading feature of your device is given below. You can create a table as displayed below by learning the consumed energy amount according to starting and ending date and time. This way, you can keep track of the check in/check out operations of your facility.

	A	B	C	D	E	F	G	H	I
1		Counters	Location Name	Unit	Unit Price ($)	Check-in Date and Time	Check-out Date and Time	Used Energy	Payment ($)
2		Counter1	C6	Wh	1	15/04/12 12:00	17/04/12 19:00	10	10
3		Counter2	C7	Wh	1	16/04/12 10:00	16/04/12 20:00	5	5
4		Counter3	C8	Wh	1				0
5		Counter4	D2	Wh	1				0
6		Counter5	D3	Wh	1				0
7	1. zone	Counter6	D4	Wh	1				0
8	EPC-12	Counter7	1. room	Wh	1				0
9		Counter8	2. room	Wh	1				0
10		Counter9		Wh	1				0
11		Counter10		Wh	1				0
12		Counter11		Wh	1				0
13		Counter12		Wh	1				0
14		Counter1		L	1,1	17/04/12 19:00			0
15		Counter2		L	1,1	16/04/12 20:00			0
16		Counter3		L	1,1				0
17		Counter4		L	1,1				0
18		Counter5		L	1,1				0
19	2. zone	Counter6		L	1,1				0
20	EPC-12	Counter7		L	1,1				0
21		Counter8		L	1,1				0
22		Counter9		L	1,1				0
23		Counter10		L	1,1				0
24		Counter11		L	1,1				0
25		Counter12		L	1,1				0
26		Counter1		m3	0,8	17/04/12 19:00			0
27		Counter2		m3	0,8	16/04/12 20:00			0
28		Counter3		m3	0,8				0
29		Counter4		m3	0,8				0
30		Counter5		m3	0,8				0
31	3. zone	Counter6		m3	0,8				0
32	EPC-12	Counter7		m3	0,8				0
33		Counter8		m3	0,8				0
34		Counter9		m3	0,8				0
35		Counter10		m3	0,8				0
36		Counter11		m3	0,8				0
37		Counter12		m3	0,8				0

Factory Settings
User name : admin
Password : 1234